THE CLAIMS

What is claimed is:

1. A process for preparing a hydrotreating catalyst composition which comprise of a composite carrier having an alumina part and a zeolite part wherein active metal belonging to group VIB of the periodic table and active metal belonging to Group VIII of the periodic table having particle size less than about 50 Å are being preferentially supported on the alumina part of the composite carrier, and useful for desulfurization of gasoils, said process comprising the steps of:

(a) impregnating a chelated metal solution containing at least one group VI B and at least one group VIII metal on to an alumina support, optionally in presence of a complexing agent;

(b) flash drying the metal impregnated alumina support of step (a);

(c) ball milling the flash dried metal-impregnated alumina support of step (b);

(d) mixing the ball-milled metal-impregnated alumina support of step (c) with USY zeolite;

(e) ball milling the mixture of step (d);

(f) adding to the ball milled mixture of step (e) a phosphorous source;

(g) aging the mixture of step (f) for a time period ranging between about 1 to 5 hours, and

(h) molding, drying and calcining the mixture of step (f) to obtain the hydrotreating catalyst composition.

2. A process as claimed in claim 1, wherein the metal solution is an aqueous solution of corresponding soluble metal salt.

3. A process as claimed in claim 1, wherein the group VI B metal is molybdenum.

4. A process as claimed in claim 1, wherein the group VIII metal is selected from cobalt or nickel.

5. A process as claimed in claim 4, wherein the group VIII metal is cobalt.

6. A process as claimed in claim 1, wherein impregnation of the chelated metal solution on to the alumina support is done by incipient wetness method.

7. A process as claimed in claim 1, wherein the alumina used in step (a) has the following characteristics:

Al_2O_3	74 wt%
Na_2O	0.002 wt%
Surface Area (BET)	250 m^2/g
Pore Volume	0.50 ml/g

8. A process as claimed in claim 1 wherein in step (a), the complexing agent is soduim salt of EDTA.

9. A process as claimed in claim 1 wherein in step (b), the metal impregnated alumina support is flash dried by heating at a temperature ranging from about 40° to 200°C.

10. A process as claimed in claim 9 wherein, the metal impregnated alumina support is flash dried by heating at a temperature ranging from about 80° to 150°C.

11. A process as claimed in claim 1 wherein in step (c), the flash dried metal-impregnated alumina support is ball milled for a time period ranging from about 10 minutes to 1 hour.

12. A process as claimed in claim 11, wherein the flash dried metal-impregnated alumina support is ball milled for about 30 minutes.

13. A process as claimed in claim 1 wherein in step (d), the Unit Cell Size (UCS) of the USY zeolite used is in the range of about 24.25 to 24.45 Å.

14. A process as claimed in claim 13, wherein the UCS of the USY zeolite is about 24.35 Å.

15. A process as claimed in claim 1 wherein in step (d), the weight percentage of USY zeolite used is in the range of about 1 to 10.

16. A process as claimed in claim 15, wherein the weight percentage of USY zeolite used is in the range of about 1 to 5.

17. A process as claimed in claim 1 wherein in step (e), the mixture of ball-milled metal-impregnated alumina support and USY zeolite is ball milled for a time period ranging from about 10 minutes to 2 hours.

18. A process as claimed in claim 17, wherein the mixture of ball-milled metal-impregnated alumina support and USY zeolite is ball milled for a time period ranging from about 10 minutes to 1 hour.

19. A process as claimed in claim 1 wherein in step (f), the phosphorous source is di-ammonium hydrogen phosphate.

20. A process as claimed in claim 19, wherein di-ammonium hydrogen phosphate used is in the weight range of about 0.1 to 5 % by total weight of P_2O_5.

21. A process as claimed in claim 20, wherein the di-ammonium hydrogen phosphate used is in the weight range of about 0.1 to 2 % by total weight of P_2O_5.

22. A process as claimed in claim 1 wherein in step (g), the mixture is aged for a time period ranging from about 1 to 2 hours.

23. A process as claimed in claim 1 wherein in step (h), molding is done by extrusion or granulation.

24. A process as claimed in claim 23, wherein the mixture is molded in the form of cylinders, granules or tablets.

25. A process as claimed in claim 23, wherein the diameter of the extrudate is preferably in the range of about 0.5 mm to 3.0 mm.

26. A process as claimed in claim 23, wherein the extrudate is dried at a temperature ranging between ambient temperature and 150°C for a time period ranging from about 10 to 30 hours.

27. A process as claimed in claim 26, wherein the dried extrudate is calcined at a temperature ranging from about 250° to 800°C.

28. A process as claimed in claim 27, wherein the dried extrudate is calcined at a temperature ranging from about 250° to 600°C.

29. A process as claimed in claim 1 wherein in step (h), the hydrotreating catalyst thus obtained has the following composition:

Ingredient	**Weight %**
CoO	3.841
MoO_3	20.154
Na_2O	0.002

P_2O_5	0.094
Al_2O_3	71.947
USY	3.962

30. A process as claimed in claim 1 wherein in step (h), the hydrotreating catalyst thus obtained has the following characteristics:

UCS (Å)	24.28
Total SA, m^2/g	Greater than 260
Pore Volume, cc/gm	0.25 to 0.45
Metal cluster size (Å)	Less than 50

31. A process as claimed in claim 30, wherein the hydrotreating catalyst thus obtained has the following characteristics:

UCS (Å)	24.28
Total SA, m^2/g	279
Pore Volume, cc/gm	0.29
Metal cluster size (Å)	Less than 50

32. A process as claimed in claim 1, wherein the metal is preferentially loaded on the alumina support and the zeolite is substantially free from the metal.

33. A process as claimed in claim 1, wherein the hydrotreating catalyst removes refractory sulfur species from gasoils.

34. A process as claimed in claim 1, wherein the hydrotreating catalyst produces gasoil having less than about 50-ppm sulfur from a gasoil feedstock having about 1 wt % sulfur content under commercial operating conditions.